

# Top View

## KVM-102U

### Two Ports USB KVM Switch

### USER'S MANUAL

Rev 1.2

MANMAN102U-C

#### Introduction

Thank you for purchasing the compact TOP-VIEW USB KVM switch. TOP-VIEW KVM switch can save your TIME, SPACE, EQUIPMENT and POWER.

Controlling multiple USB PCs from One PS/2 Keyboard, PS/2 Mouse and VGA Monitor or One USB Keyboard, USB Mouse and VGA Monitor. TOP-VIEW USB KVM switch is loaded with features such as hot key control, push button control and Console could be USB keyboard (or USB mouse) or standard PS/2 keyboard (or PS/2 mouse).

TOP-VIEW USB KVM switch also supports extra four comprehensive USB type A ports (if you use PS/2 console ) for user to share more USB peripherals.

TOP-VIEW USB KVM Switch is compatible to AT, PS/2 style computers, SUN Microsystems computers, G3/G4 MACs or iMACs with USB port. All of USB ports of KVM switch are compliant to USB 1.1 Specification.

#### Features

- Two ports USB KVM switch, Desk Top size design
- USB 1.1 Specification compliant
- Support UHCI, OHCI USB interface
- USB console works with Win98/SE/ME/2000/XP/WinNT, HP Unix, Linux, Sun Solaris, MAC O.S 8.6 or later version
- PS/2 console works with Win98/SE/ME/2000/XP/WinNT, HP Unix, Linux, Sun Solaris, MAC O.S 8.6 or later version
- USB KVM switch is embedded with four USB device ports (if you use PS/2 console ) for computers to share different USB peripherals.
- Manage multiple PCs, G3/G4 MACs, iMACs from one USB keyboard (or PS/2 keyboard), USB Mouse (or PS/2 mouse) and Monitor.
- Add PCs or Remove Connected PCs for Maintenance without powering down the PC
- Legacy Control: PS/2 Style Keyboard and PS/2 Style Mouse control all PCs and real time switch PC without Hub
- USB Control: USB Style Keyboard and USB Style Mouse control all PCs
- Use push button or hot key control for easy computer selection.
- LED display for easy status monitoring
- Plug N Play, No software driver needed for PS/2 keyboard and PS/2 mouse operation.
- Buzzer sound for switching port confirmation.
- Support auto scan function .
- High VGA resolution 1920X1440 and High bandwidth 200MHz.
- Support VGA DDC, DDC2, DDC2B.
- Support USB self power mode
- Independently access USB devices and select PC port

#### Package Contents

Model No. KVM-102U:  
Top-View 2 ports USB KVM Switch  
One user's manual  
One Power Adapter

#### Technical Specifications

Model No.	KVM-102U
PC Port	2 USB Type B ports
Console Port	4 USB type A ports 2 PS/2 ports
PC Port Connector	USB Type B receptacle VGA HDB 15pin Female
Console port connector	USB Type A receptacle PS/2 Keyboard Mini Din 6 pin Female PS/2 Mouse Mini Din 6 pin Female VGA HDB 15pin Female
PC selection	Hot Key or Push Button
On Screen Display	No
PC port LED	2
Hub port LED	2
MAX PC Connections	2
Scan Intervals	5 ~ 100 sec.(Default 5 Sec When power on )
Keyboard Conversion	PS/2 to USB
Mouse Conversion	PS/2 to USB
VGA Resolution	1920X1440
Bandwidth	200MHz
Power Type	Self Power
Power Adapter	DC 12V, 1A " " " " " " " "
Operation Temperature	0~40°C
Storage Temperature	-20 ~ 60°C
Humidity	0~90%, Non-Condensing
Size	Desktop size
Dimension (cm)	18(L)* 10(W)* 3.2(H)
Weight (kg)	600g

#### System Requirements

**Console side:**  
One VGA monitor  
One USB keyboard or PS/2 keyboard  
One USB mouse or PS/2 mouse

**Computers side:**  
Two HDB 15 pin male to male VGA cables  
Two USB A-B cables

#### Product Details

KVM-102U front Panel & Rear Panel:

#### MAC O.S. and Sun Micro Systems Keyboard Mapping

The following diagram indexes the Hotkey combination that emulates Mac O.S. and Sun Micro keyboard commands. This feature is only available on the PS/2 keyboard attached to the KVM, and is not available on the USB keyboard.  
Left Windows Key = L\_Win

Sun Microsystems Keyboard	Windows ps2 Keyboard	Mac OS
Stop	L_Win & L_Alt	
Props	L_Win & L_Ctrl	
Compose	L_Win & L_Shift	
Front	L_Win & F1	
Open	L_Win & F2	
Find	L_Win & F3	
Again	L_Win & F4	
Undo	L_Win & F5	
Copy	L_Win & F6	
Paste	L_Win & F7	
Cut	L_Win & F8	
Help	L_Win & F11	
Power	L_Win & F12	Power
Mute	L_Win & "1"	
V_DN	L_Win & "2"	
V_UP	L_Win & "3"	
	Windows Key	Apple Key
	Alt	Option
	Print Screen	F13
	Scroll Lock	F14
	Pause Break	F15

#### Hardware Installation

Before installation, please make sure all of peripherals and computers have been turned off.

**Windows 98/98SE user:**  
When you apply Windows 98/98SE to USB KVM Switch, please use the following set up procedures:

##### 1st Step:

- Connecting USB A-B type cables to PC and USB KVM switch. The type A connector of USB cable is for PC and the other end of USB cable is for USB KVM Switch.
- Connecting HDB15 pin ( Male to Male) cables to PC and USB KVM switch.
- VGA monitor's cable is connected to console VGA port.
- Connecting PS2 keyboard to PC PS/2 keyboard port directly and do not connect PS2 mouse to your PC
- Boot the PC and PC is unable to get the mouse during boot up system. The Window O.S. will show the following message or similar things:

" Windows did not detect a mouse attached to the computer. You can safely attach a serial mouse now. To attach a mouse to a PS/2 mouse port, you must first turn the computer off.

Do not show this message in the future. "

Please use keyboard "Tab" key, "Space" bar and "Enter" key to select the item " Do not show this message in the future." and finishing booting Windows O.S..

- It will mount USB HID (Human Interface Device) driver. Using Keyboard Tab key, Left Arrow key, Right Arrow key and Enter key to accomplish set up process.
- Repeat item 5 and 6 procedures to all of PCs.
- Please turn off USB KVM Switch and use Windows key to shut down computers.

##### 2nd Step:

- Connect PS2 keyboard ( or USB keyboard ) and PS2 mouse ( or USB Mouse ) to USB KVM Switch's console port.
- Turn on USB KVM switch and then power on all of PCs

##### Windows ME/XP/NT/2000 user:

When you apply Windows ME/XP/NT/2000 to USB KVM Switch, please use the following set up procedure:

- Connecting USB A-B type cables to PC\* and USB KVM switch. The type A connector of USB cable is for PC and the other end of USB cable is for USB KVM Switch.
- Connecting HDB15 pin ( Male to Male) cables to PC and USB KVM switch

- Turn on USB KVM switch and then boot all of PCs

\* MAC and Sun Micro Systems has the similar it mentioned-above PC installation process.

**Note:** Few monitors might cause SUN Microsystems boot-up process (Or SUN Microsystems cannot detect power off all systems and console monitor. one of methods to solve this problem :

- Putting SUN Microsystems at 1<sup>st</sup> port of this KVM boot up SUN Microsystems again.
- To add a power adapter to this KVM switch and press switch first, then go the same boot up process again

##### DOS User:

If the motherboard BIOS' USB port is disabled in default you apply USB keyboard or USB mouse to PC. It does DOS mode. Please disconnect USB keyboard or USB connect PS2 keyboard to the PS2 port of PC for error USB port.

Different motherboard BIOS has different USB procedure. Here are some examples, which based on BIOS version, below for the user reference.

- AWARD BIOS: To press "Del" key immediately for times when powering on PC and you will get into mode → Select "Advanced" item → USB Legal Select "AUTO" → Save and quit BIOS set up.
- PHOENIX BIOS: To press "F2" after powering on BIOS set up mode → Select "Advanced" item → support → Select "Enable" → Save and quit BIOS
- AMI BIOS: To press "Del" key immediately for times when powering on PC and you will get into mode → Select "Chipset features setup" → USB controller USB KB/Mouse → KEYB+MOUSE → Save BIOS set up.

**Note:** If the PC BIOS need check keyboard at computer process and the PC might show keyboard error on the screen, please configure the BIOS setting again

When you enter BIOS set up mode, please select the "Error" or the other Error condition setting and select errors but Keyboard" or to ignore keyboard during boot process.

#### Usage

##### Keyboard:

There are two kinds of keyboard --- PS/2 type or USB applied to this switch.

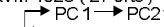
##### Mouse:

There are two kinds of mouse --- PS/2 type or USB applied to this switch.

##### The Push Button:

USB KVM switch supports one push button. You can connect port and USB hub together through it. i.e. Hub and PC selected at the same time  
Pressing the button cyclically through all the ports will

KVM-102U ( 2 Ports )



##### The LED of PC Selection Indication:

You can press the button in order like mentioned above. When you select one of two PC ports and this PC is connected to the PC, the selected port LED is lit. When you select one of two PC ports and no PC is powered on, the selected port LED is lit.

##### The LED of USB Hub Selection Indication:

There are two LEDs indicate the location of USB hub. When LED 1 is lit, it means that USB hub is occupied by USB hub LED 2 is lit, it means that USB hub is occupied.

##### Hot Key control:

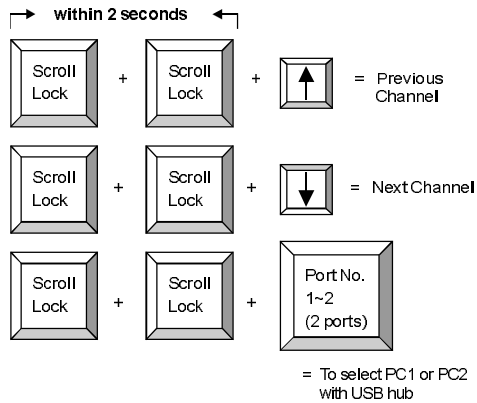
You can also conveniently command Top-View KVM switching ports through simple key sequences.

##### Operation: PS2 Keyboard Hot Key

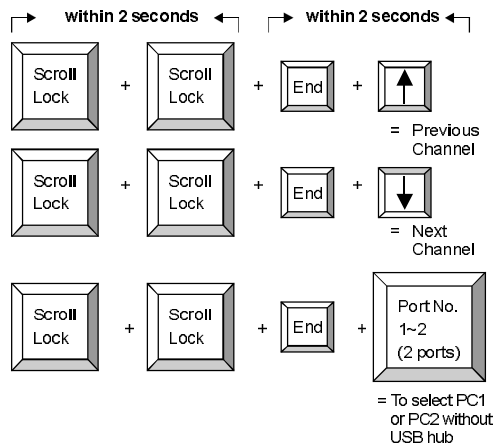
PS/2 Keyboard user : ( This applies to Windows 98SE/ME/2000/XP/WinNT, HP Unix, Linux MAC O.S 8.6 or later version operation systems )

To send commands to Top-View USB KVM, the SC key must be pressed twice within 2 seconds. You will

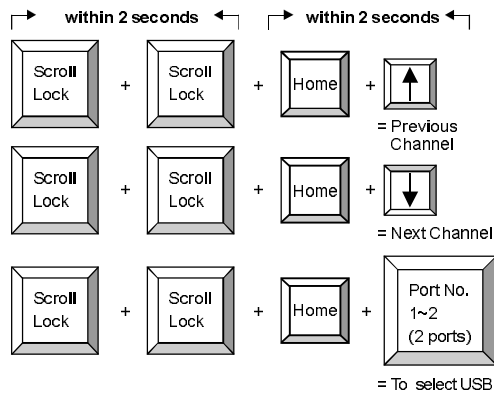
**To select PC port with USB hub in PS2 hot key :**



**To select PC port only in PS2 hot key :**



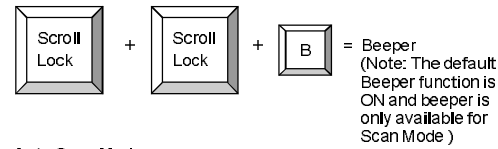
**To select USB Hub port only in PS2 hot key :**



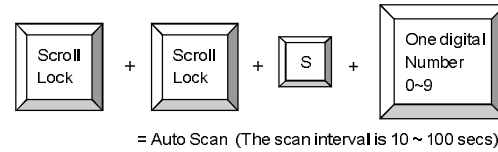
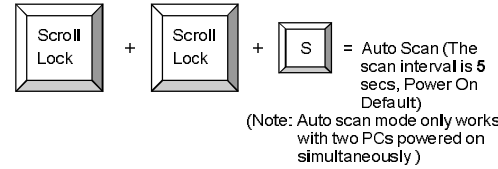
For helping you to remember hot key, the USB "Hub" and "Home" key have the same initial character "H".

Note: Some USB devices (For example: External Storage -- Hard Disk, CD-ROM Drive or the other device) must finish the job before you try to switch the USB. Otherwise, the improper switch action will cause unpredictable damage at

**Beeper Function:**



**Auto Scan Mode:**



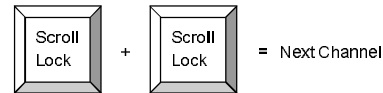
Digital Number	1: 10 secs	2: 20 secs	3: 30 secs	4: 40 secs	5: 50 secs	6: 60 secs	7: 70secs	8: 80 secs	9: 90 secs	0: 100 secs
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**Operation: USB Keyboard Hot Key**

USB Keyboard user: ( This application is only available on PC\* with Win98/98SE/ME/2000/XP operation systems )

Press "Scroll Lock" twice within two seconds to switch to the next channels.

**To switch PC channel and USB Hub together in the following key sequence:**



\*\*\* Mac O.S. and Sun Micro Systems Keyboard Mapping is not available on USB keyboard

**Troubleshooting**

Ensure that all cables are well seated. Label all of cables with the number for each respective computer to avoid confusion.

**IBM PC or Compatible :**

PC cannot find keyboard or mouse after the boot process. Please make sure you power on the system PC port by PC port for booting Windows O.S. and for recognizing what kind of keyboard and mouse before you install this USB KVM switch first.

Keyboard or mouse not working or not compatible with the PC, please make sure the keyboard or mouse works when directly plug in to the computer. If the problem persists, please try another keyboard or mouse.

Mouse doesn't work in Auto Scan mode, you can press any key on the keyboard or the front button on the face plate for returning standard mode and then use the Keyboard or Mouse again.

When KVM switch is in Auto Scan mode, there are only VGA monitor display and CPU alternately (but the USB Hub is not switched in auto scan mode). After you press any key, the PC port will be selected at the same time, as you see the current PC Screen.

If you apply PS/2 keyboard to USB KVM switch's PS/2 port and are fail in booting PC on account of keyboard error ( There is a keyboard error message exists on the screen ), the PC BIOS ( Basic Input Output System ) need be set ( please see the hardware installation procedure ) or upgraded to new BIOS for accepting USB to PS/2 conversion. Normally, most of BIOS support , during PC boot process, to recognize USB to PS/2 keyboard conversion or USB keyboard.

For 4D or 5D mouse user, it is recommended to be used with a USB hub port of USB KVM switch if the mouse supported with USB type. Due to USB conversion standard does not define PS2 to USB converter for 4D or 5D mouse, these extra user define key will lose function when the users use the PS2 port of USB KVM switch.

The recommended VGA cable distance is 5 meters maximum without ghosting and degradation. Normally, the cable length is based on driver capacity of your VGA card. If you need longer VGA cable, please use VGA extender to accomplish your applications.

The recommended keyboard or mouse cable is 10 feet maximum without degradation. Normally, the cable length is based on driver capacity of your motherboard. If you need longer keyboard or mouse cable, please use keyboard or mouse extender to get your applications.

When you switch USB Hub from one PC to another and there are many USB devices are attached to the PC, it will take about 5~10 seconds for all USB devices initialization. So, to switch port will take more time than the switching time of conventional PS/2 KVM switch.

When you use Japanese windows OS with 106 key keyboard, there are some special keys like "¥" need 106 key driver (Microsoft native driver in OS CD-ROM ). Please follow procedures below and click the mouse to add new driver.

Win98/SE/ME :  
control panel → Add new hardware → Next → Next → Select "No, the device isn't in the list" → Select "No, I want to select the hardware from a list" → Select keyboard → Select standard keyboard → Select (日本語) Japanese 106 key keyboard → Reboot PC

Win2000 :  
Control panel → System → Hardware → Device manager → Keyboards → Standard keyboard → Click mouse right key → Properties → Driver → Update driver → Display a list of the known drivers → For this device so that I can choose a specific driver → Standard keyboard → Standard (日本語) Japanese 106 key keyboard → Reboot PC

WinNT :  
Control panel → Keyboard → General → Change → Show all devices → Standard (日本語) Japanese 106 key keyboard → Reboot PC

WinXP :  
Control panel → System → Hardware → Device manager → Keyboards → Standard keyboard → Click mouse right key → driver → Update driver → Install from a list or specific location (advanced) → Don't search. I will choose the driver to install → Deselect show compatible hardware → Standard keyboard → Standard (日本語) Japanese 106 key keyboard → Reboot PC

**SUN Microsystems :**

If you apply a PC USB keyboard to one of USB hub ports and SUN Microsystems are connected to this USB KVM switch, there is no SUN-to-PC keyboard mapping available. SUN-to-PC keyboard mapping is only valid at PS/2 keyboard port of USB KVM switch. You also can connect SUN USB keyboard to one of USB Hub ports.

If you apply PC USB keyboard or SUN USB keyboard to one of USB hub ports and SUN Microsystems are connected to this USB KVM switch, there is no Hot Key function for this application.

**MAC Computer :**

If you apply PC USB keyboard to one of USB hub ports and MAC computers are connected to this USB KVM switch, there is no MAC-to-PC keyboard mapping available. MAC keyboard mapping is only valid at PS/2 keyboard port of KVM switch. You also can connect MAC keyboard to USB Hub ports.

If you apply PC USB keyboard or MAC keyboard to one of USB hub ports and MAC computers are connected to this USB KVM switch, there is no Hot Key function for this application

**CERTIFICATIONS**

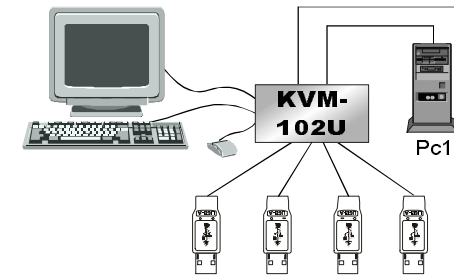
**FCC**

This equipment has been tested and found to comply with the FCC Rules. Operation is subject to the following conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received. In interference that may cause undesired operation.

**CE Certificate**

This equipment is in compliance with the requirements of following regulations: EN 55 022: CLASS B



USB Keyboard, USB Mouse or other USB device